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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/251,988 | 02/17/1999 | BRIAN SAMUEL BEAMAN | Y0998-088 | 3930 |

7590 03/01/2007
IBM CORPORATION
INTELLECTUAL PROPERTY LAW DEPT
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YORKTOWN HEIGHTS, NY 10598

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| EXAMINER |
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HOLLINGTON, JERMELE M

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| ART UNIT | PAPER NUMBER |
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2829

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/01/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/251,988

Applicant(s)

BEAMAN ET AL.

Examiner

Jermele M. Hollington

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7, 10, 41-43, 49, 50 and 58-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 10, 41-43, 49, 50 and 58-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Allowable Subject Matter

1. Applicant is advised that the Notice of Allowance mailed is vacated. If the issue fee has already been paid, applicant may request a refund or request that the fee be credited to a deposit account. However, applicant may wait until the application is either found allowable or held abandoned. If allowed, upon receipt of a new Notice of Allowance, applicant may request that the previously submitted issue fee be applied. If abandoned, applicant may request refund or credit to a specified Deposit Account.

2. Prosecution on the merits of this application is reopened on claims 54-68 considered unpatentable for the reasons indicated below.

Base on the vacated allowance, the following is being applied.

Interference

3. The request for interference filed December 14, 2006 is acknowledged. However, examination of this application has not been completed as required by 37 CFR 41.102(a).

Consideration of a potential interference is premature at this time. See MPEP § 2303.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 7, 10, 41-43, 49, 51, 58-60 are rejected under 35 U.S.C. 102(e) as being anticipated by Okubo et al (5134365).

Regarding claim 41, Okubo et al disclose a method [see also Fig. 1] comprising: providing a substrate (board 10) having a surface (top surface of 10); forming a plurality of flexible elongated electrical conductors (probes 30) extending away from said surface; each of said flexible elongated electrical conductors (30) having a first end (rear end 33) affixed to said surface [via solder 331] and a second end (probe tip 32) projecting away from said surface (top of 10); there being a plurality of said second ends (32); providing a means for maintaining said plurality of said second ends (32) in substantially fixed positions [via resin 50] with respect to each other.

Regarding claim 49, Okubo et al disclose means for maintaining comprising a sheet of material (support 20) having a plurality of opening (openings 11 and 21).

Regarding claim 7, Okubo et al disclose said sheet of material (20) is spaced apart from said surface by a flexible support (opening 11).

Regarding claim 10, Okubo et al disclose said sheet (20) and said flexible support (11) forms a space containing said plurality of elongated electrical conductors (30).

Regarding claim 42, Okubo et al disclose said sheet (20) is formed and material selected from the group consisting of Invar, Cu/Invar/Cu, molybdenum, and polyimides.

Regarding claim 43, Okubo et al disclose said sheet (20) is formed from a material selected from the group consisting of a metal, a polymer, a semiconductor and dielectric.

Regarding claim 51, Okubo et al disclose said means for maintaining (20) comprises openings comprising a large region (21) and a small region (within resin 50), said compliant

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elongated electrical conductors (30) are first inserted through said large region (21) and then moved to said small region (within resin 50).

Regarding claim 58, Okubo et al disclose said means for maintaining (20) is a sheet of material comprising a plurality of openings (21) through which said second ends (32) project.

Regarding claim 59, Okubo et al disclose said means for maintaining (20) comprises at least one sheet of material comprising a plurality of openings (21) through which said second ends (32) project.

Regarding claim 60, Okubo et al disclose of said at least one sheet (20) is a sheet of electrically conductive material which has a top surface and a bottom surface and said openings (21) have a sidewall, a dielectric material coats said top surface and said bottom surface and said sidewall.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 for details.

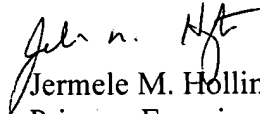
7. Applicant's arguments with respect to claims 7, 10, 41-43, 49, 51, 58-60 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jermele M. Hollington whose telephone number is (571) 272-1960. The examiner can normally be reached on M-F (9:00-4:00 EST) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on (571) 272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jermele M. Hollington
Primary Examiner
Art Unit 2829

JMH
February 26, 2007